

Comparisons of Job Characteristics

Focus Occupation: **Surgeons (29-1067)**

Associated Occupation: **Internists, General (29-1063)**

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Surgeons (29-1067)

Associated Occupation: Internists, General (29-1063)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Medicine and Dentistry	3.7	23.4	25.0	0	Current knowledge level may be sufficient
Biology	3.7	18.3	16.8	0	Current knowledge level may be sufficient
English Language	11.2	18.0	14.8	<	Expanded education and/or training may be required
Therapy and Counseling	3.8	17.8	14.4	<<	Extensive education and/or training may be required
Psychology	6.4	17.2	15.8	0	Current knowledge level may be sufficient
Education and Training	9.2	16.5	11.8	<<	Extensive education and/or training may be required
Chemistry	4.8	10.4	10.4	0	Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 94

Focus Occupation: Surgeons (29-1067)

Associated Occupation: Internists, General (29-1063)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Science	4.5	16.0	16.0	0	Current skill level may be sufficient
Reading Comprehension	10.7	15.4	19.5	>>	Skill level is likely more than sufficient
Speaking	10.8	15.2	15.7	0	Current skill level may be sufficient
Critical Thinking	10.8	14.5	16.9	>	Skill level is likely sufficient
Active Listening	11.0	14.4	17.0	>	Skill level is likely sufficient
Complex Problem Solving	9.1	14.4	15.4	0	Current skill level may be sufficient
Writing	9.2	13.9	14.4	0	Current skill level may be sufficient

Judgment and Decision Making	9.4	13.6	16.0	>	Skill level is likely sufficient
Active Learning	8.7	13.5	17.3	>>	Skill level is likely more than sufficient
Social Perceptiveness	9.1	13.0	13.6	0	Current skill level may be sufficient
Monitoring	9.9	12.9	14.8	>	Skill level is likely sufficient
Service Orientation	7.9	12.2	12.3	0	Current skill level may be sufficient
Operations Analysis	5.0	11.7	8.9	<<	Extensive development of skills in this area may be required
Persuasion	7.4	11.1	8.3	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 90			
Focus Occupation: Surgeons (29-1067) Associated Occupation: Internists, General (29-1063)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Problem Sensitivity	11.1	19.9	21.8	0	Current ability level may be sufficient
Inductive Reasoning	10.2	18.4	18.5	0	Current ability level may be sufficient
Oral Expression	12.4	17.8	17.3	0	Current ability level may be sufficient
Oral Comprehension	12.5	17.7	18.0	0	Current ability level may be sufficient
Written Comprehension	11.0	17.2	17.5	0	Current ability level may be sufficient
Deductive Reasoning	10.6	14.8	17.0	>	Current ability level is likely sufficient
Written Expression	9.8	14.1	15.6	>	Current ability level is likely sufficient
Information Ordering	9.9	12.2	14.2	>	Current ability level is likely sufficient
Category Flexibility	9.0	11.4	12.6	>	Current ability level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 100
Focus Occupation: Surgeons (29-1067) Associated Occupation: Internists, General (29-1063)		
Work Activities	Exclusivity of Activity	
Administer anesthetics	77	
Administer injections	60	
Administer medications or treatments	46	
Analyze medical data	57	
Analyze patient activity	73	
Collect clinical data	56	
Communicate technical information	4	

Conduct complete physical examinations	85
Conduct patient assessments	69
Diagnose or treat oral injuries	85
Follow confidentiality procedures	58
Follow dental or medical office procedures	68
Follow examining room procedures	84
Follow infectious materials procedures	52
Follow life support procedures	81
Follow operating room procedures	84
Follow patient care procedures	60
Follow surgical procedures	81
Identify body response variations	57
Interpret medical laboratory test results	72
Interpret x-rays	76
Make decisions	24
Make presentations on health or medical issues	50
Observe patient condition	48
Obtain information from clients, customers, or patients	40
Order medical laboratory tests	76
Prepare required government reports	78
Prescribe or recommend drugs, medical devices or other forms of treatment	76
Recognize physical or emotional abuse	68
Take vital signs	56
Treat medical condition of patient	75
Understand properties or composition of drugs	64
Understand technical operating, service or repair manuals	6
Use clinical problem solving techniques	69
Use counseling techniques	60
Use emergency medical procedures	64
Use emergency medical treatment procedures	76
Use grief counseling techniques	76
Use interpersonal communication techniques	10
Use knowledge of investigation techniques	16
Use knowledge of medical terminology	40
Use medical diagnostic techniques	71
Use research methodology procedures in health care	63
Use sanitation practices in health care settings	48
Write technical health or medical documents	73

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

**Similarity of Focus
Occupation to Associated
Occupation: 82**

Focus Occupation: Surgeons (29-1067)
Associated Occupation: Internists, General (29-1063)

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Electrocardiography EKG units and related products	20
Emergency medical services resuscitation products	15
Endoscopes and accessories and related products	37
Industry specific software	1
Medical gloves and accessories	19
Medical ultrasound and doppler and echo imaging products	19
Pulse oximeters	18
Scopes and specula and accessories for medical exam diagnostic use	23
Surgical clamps and forceps and surgical ligators and related instruments	29
Surgical cutting instruments and snares and related products	24
Surgical equipment and accessories and related products	23
Suture and related products	23
Vascular imaging and interventional cardiology and cardiac catheterization lab products	40

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.